Ghana Covid Risk Index

L.Boateng

Introduction

Outbreak of corona virus disease (COVID 19) –Dec 2019

Epi-centre

China-Wuhan city-Hubei Province

All continents affected

Globally, as of 2:00am, 26 April 2020

2,810,325 confirmed cases

193,825 deaths (WHO)

African Region

20 316 confirmed

839 deaths

Ghana

1550 confirmed cases

11 death

Project –Ghana Flu Trends 2019

Analysis 2019 Flu (Upper Resp. Tract Infections) trends

Construct a disease risk index for Ghana

Provides in sights on Ghana's Flu season

(May to July) and Oct- Nov.

Dataset

DHIMS-2 Health information database of the Ghana Health Service.

Dataset

- Flu data by month
  - Monthly reported cases of districts in Ghana 2019
- Ghana Disease Trend 2017-2019
  - Yearly reported cases of Malaria, Anemia, HPTN, DM, URTI
- Shape files for Ghana

Steps

- Data cleaning
- Heat Maps for Regions in Ghana
- GIS maps
  - Ghana Covid Risk score
  - Proportion of cases reported in
    - May-July
    - Oct-Nov

Ghana Flu Trends 2019

Two main peaks

- May-July
- Octo-Nov

Heat Map of Flu Cases by Regions in Ghana

Ghana Covid-19 Risk Index

Disease	Weight
Hypertension	1
Diabetes	1
Malaria	0.5
Anemia	0.5
URTI	1

Ghana Flu cases Proportion contributed during flu season May-July

Ghana Flu cases Proportion contributed during flu season Oct-Nov

Key learnings

Regions

Second Flu season has more cases

Ashanti region >Eastern region> Western :Top 3

Districts

Within regions there variations in reported cases.

Districts should monitor yearly trends to identify outbreak.

- Thank you